CSR4 REPORT

Title II

FOOD FOR THE HUNGRY INTERNATIONAL/KENYA

Fiscal Year 2001 Results Report

(CSR4)

Submission Date to USAID/Kenya Mission: 31 December, 2001
Submission Date to USAID/BHR/FFP: 31 January, 2002

FHI Headquarters Contact Person

Buck Deines
Title II Manager
7807 E. Greenway Rd, Suite 3
Scottsdale AZ 85260
Tel. 480 951 5090
Fax 480 951 9035
e-mail bdeines@fhi.net

FHI Kenya Contact Person

Victor Addom
Country Director
Marcus Garvey Rd, off Agwings Kodheck Rd
P. O. Box 14978, Nairobi Kenya
Tel. 254 2 726047/726048
Fax. 254 2 576925
E-mail vaddom@fhi.net

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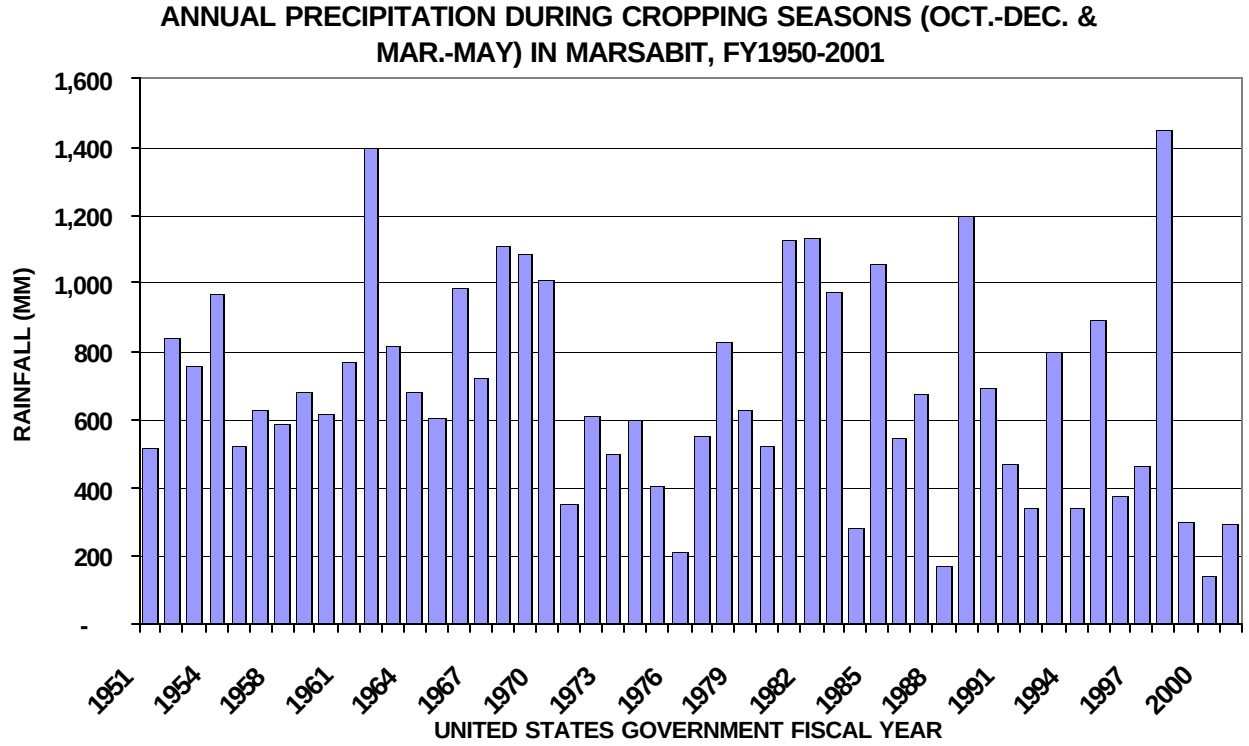
1. RESULTS REPORT

A. Annual Results

Overview

FHI/Kenya has continued to make significant progress in transferring skills and technologies to almost 2,800 farming families, which are improving their food security. This is a significant achievement in the context of the most severe and continuous drought in living memory; and given the fact that arable farming is new to the majority of project participants.

As shown in the graph below, the start of this drought coincided with the start of the project and rainfall throughout the Life of Activity (LOA) has been well below that required to support normal crop growth. The rainfall figures of just 13 mm for the March - May (United States Fiscal Year (FY) 2000) growing season and 60 mm for the October - December (FY2001) season in 2000 were both the lowest for over 50 years. The drought resulted in complete crop failure in four of the six seasons in the Development Activity Proposal (DAP). In the remaining two seasons, pest outbreaks of armyworm and the American bollworm, precipitated by the prolonged drought, destroyed the would-be harvests. Such a situation could not have been foreseen at the time of writing the project.



In response to this situation FHI's Emergency Relief Program has undertaken the role of lead agency in the distribution of WFP famine relief food for the entire Marsabit district

since April 2000 and this is likely to continue in 2002. At the year end in September 2001, 82% of households were in receipt of an average monthly ration of 47 kg of cereals, while 69% of children under five years were provided with supplementary feeding of an average 4.1 kg / month of UNIMIX[1].

The following excerpt from the UN gives an impression of the seriousness of this situation especially in Marsabit.

> NAIROBI, 19 October 2001 (IRIN) - Key indicators worsened for many pastoralists communities during September and **welfare has worsened seriously** in Mandera, **Marsabit** and Wajir, northeastern Kenya,. … pastoral and eastern areas - notably Mandera and **Marsabit** - had characteristically low rainfall. "Most surface water sources have dried up [in pastoral areas], limiting water sources to boreholes, wells and tankered water," according to FEWS. Much of pastoralists' livestock had now migrated to dry-season grazing areas much earlier than usual, it said. Long trekking distances had compromised the health and productivity of some animals, …Already, low milk output had raised rates of child malnutrition, which had previously stabilised and even improved in places, in a development attributed to supplementary feeding interventions by UNICEF, it added. **Increased rates of child malnutrition** were now being reported in Wajir, **Marsabit**, Tana River and Mandera districts, FEWS reported. In Mandera, **Marsabit** and Wajir, a number of areas had already been classified by the Arid Lands Resource Management Project as emergencies - "meaning that **environmental indicators had fluctuated outside normal ranges** and welfare status had worsened seriously, resulting in **famine threat**," it said. The network recommended that the Kenyan government and its key partners work urgently to: rehabilitate key water sources in dry-grazing areas; strengthen security measures and encourage peace initiatives to improve pastoralists' coping abilities; and continue supplementary feeding for malnourished children.

The worsening short-term food security situation has particularly impacted the vulnerable under five age group, where nutrition rates actually worsened until FY2001, although with emergency feeding programs and adoption of improved nutrition practices, rates in FY2001 have improved. Final impact indicator targets were not adjusted downward to allow for the impact of successive droughts, which makes attaining them increasingly difficult. Therefore, although both agriculture and nutrition components are otherwise on track, due to the drought and what are now over-ambitious targets, key program final impact indicators cannot be achieved in the LOA. However high adoption levels of dryland farming techniques with Drought Tolerant Crops (DTC's) and improved nutrition practices will result in significant impact in the final year of the project and beyond given normal rainfall patterns.

The project operation area has remained the same over the DAP period. Previous suggestions that the project area be extended to Sololo did not materialize due to the fragile security situation along the Kenya-Ethiopia borderland. In Marsabit tribal skirmishes precipitated by cattle rustling occurred in May. Despite the fact that farming families in prime agriculture zones such as Songa, Badassa and Kituruni temporarily fled their homes, there was no significant impact to their food security, or program implementation, as it occurred for a period of just one week, just before weeding.

FHI has continued to focus on an integrated team concept, bringing together both health and agriculture staff for regular meetings with community leaders to coordinate activities

[1] GOK Arid Lands Development Project, Office of the President (2001)

in each of the seven zones of project operation. This is resulting in higher levels of community mobilization, better integration of component interventions, and increased efficiency.

Agriculture Component

Results for the agricultural component of the food security program are summarized in the indicator-tracking table at the end of this section.

Participant training

FHI continued to encourage farmers to adopt other dry land farming techniques and technologies such as early planting, weeding and thinning, soil and water conservation and enterprise diversification, and particularly raising of drought tolerant crops through farmer trainings aimed at technology and skills transfer via demonstration farms and off-station plots.

Those few farmers who have tried the “new” crops promoted by FHI, were able to achieve some yields despite the seriousness of the drought; while those relying on "traditional" maize and bean crops have seen the complete failure of their harvests. This has encouraged increasing numbers of farmers to try the new crops, and increased the interest of farmers in project trainings. In the first year of the project farmers planted sorghum, mostly just to please FHI staff. It was planted after all other crops, at the very end of the farm, and weeded last, if at all. We now hear comments from the community like, "When my children take sorghum porridge they hardly complain of hunger during the day, next time I will plant more and take care of it;" or "the kids have even gone back to pick up the few grains that fell during harvesting, ".

Evidence of this increased interest has been seen in doubling the 1,087 attending training in FY2000, to 2,789 participants in FY2001. This exceeds the 550 annual target by 407%. Some 940 of these farmers, compared to 653 farmers in FY2000, received further training on the off-station plots by the project staff. Similarly, the number of women farmers trained in raising and utilizing drought-tolerant crops more than doubled from 124 in FY2000 to 335, exceeding the target of 60 by 458%. (FHI makes a deliberate effort to ensure women farmers' participation in training. This is accomplished through the provision of gender awareness training to village committees, which helps leaders appreciate the central importance of women in food security; ensuring female participation and representation on the committees; encouraging the selection of female trainees; and organizing trainings at times convenient to women).

Fifty-six percent of participant farmers are now growing DTC’s alongside maize and beans. This is particularly significant change, as farmers were initially reluctant to even consider planting the new crops.

A total of 97% of farmers have changed some of their agricultural production practices during the project, and 87% of contact farmers claimed to have benefited from the technologies they have learned. Significantly, despite the continued drought, 74% of project farmers still maintain a positive attitude towards farming. When the area receives a normal pattern of rainfall again, the impact of adoption of these practices will become even more evident. Unfortunately FHI is not able to report adoption in relation to the

logframe, due to the fact that external midterm consultants did not measure these indicators as requested (see monitoring and evaluation section).

These results are very significant given the fact that Marsabit farmers, traditionally pastoralists, are relatively new to arable farming, and so have little basic knowledge, compared to traditional farmers. Furthermore they are less confident, which slows the speed at which they take up new ideas. FHI has now achieved a very good coverage of farming families in the area, introducing them to improved farming practices. In a dramatic change of attitude, communities now see crop farming as honorable profession, essential in attaining food security.

FHI has responded to the drought by intensifying collaboration with the Kenya Agricultural Research Institute's (KARI), National Dryland Research Station in Katumani. Water harvesting techniques developed by KARI have shown encouraging results on the station and with farmers in similar conditions to the project area, especially where used with DTC's. However the station is located some 900km from Marsabit and areas where these techniques have also been adopted are equally distant, it is necessary to test these varieties and techniques with farmers locally. This is both to verify whether the varieties perform well under local conditions and are acceptable to local people; and to ensure that the techniques are practicable in the local farming system. Collaboration has included additional training of project staff in dryland crop farming and the participatory testing of these techniques with farmers on project demonstration farms. Techniques being tested, as of October FY 2002, include; double digging, 9-seed hole, "madara" bed and ridging for field crops, the mobile bag and the compost basket (for vegetable growing). These techniques are being tested on FHI demonstration farms and individual farmers' farms.

The drought resulted in serious problems with regard to demonstration plots and farms. The four demonstration farms established in the previous DAP continued to be used for demonstrating techniques and technologies being promoted and carrying out the crop adaptation tests. However, the number of off-station farmer maintained demonstration sites was reduced from 27 in FY2000 to 16 in FY2001 principally due to the prolonged drought causing them to be abandoned. 33 season-long trainees were unable to graduate in FY2000 due to the drought, and continued to be trained this year. No new family gardens reached harvesting stage since the rains stopped prematurely and no grain silos were constructed, as families have not got significant amounts of grain available to store.

Seed distribution

Marsabit Food Security Project (MFSP) is focused upon introducing well adapted, high yielding, open-pollinated varieties of drought-tolerant crops (sorghum and cowpea) to the area. However the past six seasons of crop failure have meant that farmers had little planting seed left at planting time. Due to a previous preference for non-drought tolerant crops such as maize, even fewer farmers had seed of the drought-tolerant crops being promoted. However farmer interest in DTC's has increased dramatically in this year, largely as a result of FHI/K's effective extension program.

FHI/K distributed 56 Metric Tons (MT) of appropriate seed to 5,700 participants in both planting seasons this year in response to the total crop failures experienced in FY 2000

and to the increased demand for DTC seed. This exceeded the set target of 9MT for FY 2001 by 522% and marks a dramatic increase over the 20 MT distributed last year. All distributed seed was of varieties recommended by the Kenya Agricultural Research Institute (KARI).

Agriculture Component Indicator Performance Tracking Table

Agriculture Indicators	Base-line	FY99 Target	FY99 Ach'd	FY99 % Ach'd v Target	FY00 Target	FY00 Ach'd	FY00 % Ach'd v Target	FY01 Target	FY01 Ach'd	FY01 % Ach'd v Target	FY02 Target	FY02 Ach'd	FY02 % Ach'd v Target	LOA Target	LOA achieved
Final Impact Indicators															
. Decrease child malnutrition														Decrease by 20%	
.% of children 2-5 years with ht for age Z score < -2.0	40%	38%	32%	+6%	36%	42 %	-6%	34%	39%	-5%	32%			32%	39%
.2% of children 24-35 mo with ht for age Z-score<2.0	45%	42%	(h)	(h)	40%	(h)	(h)	38%	(h)	(h)	36%			36%	(h)
.3 Average ht-for-age Z-score of children 2-5 yrs.	-1.5	-1.43	-1.39	+3%	-1.35	-1.52	-13%	-1.28	-1.5	-17%	-1.2			-1.2	-1.5
2.1 Average total "long rain" production of cereals n beneficiary farm households (per household)	0.45 MT	(a)	(a)					0.9 MT	(a) (i)		0.9 MT			Increase by 300% 1.8 MT	(a) (i)
2.2 Proportion of foods on beneficiary farms roduced from drought-tolerant food kinds	6%	(a)	(a)					15%	(a) (i)		15%			Increase to 25%	(a) (i)
. Average amount of post-harvest grain provision in eneficiary h.holds														Increase to 6 mo.	
3.1 Cereal	2 mo.	(a)	(a)					4 mo.	(a)		4 mo.			3 mo.	(a)
3.2 Pulse	1 mo.	(a)	(a)					2 mo.	(i)		2 mo.				(i)
ntermediate Impact Indicators															
.Average seasonal yield of the following:															
1.1 maize (MT/HA)	.55*													Increase by:	
1.2 beans (MT/HA)	.22*	1.11	(a)	(a)	1.48	(a)	(a)	1.66	(g)		1.75			300% (1.75)	(g)
1.3 sorghum (MT/HA)	.3	.20	(a)	(a)	.25	(a)	(a)	.30	(g)		.33			60% (0.33)	(g)
1.4 cow pea / pigeon pea (MT/HA)	(est) .15 est)	.60 .20	(a) (a)	(a) (a)	0.75 .25	(a) (a)	(a) (a)	0.90 .30	(g) (g)		1.05 .33			300% (1.05) 120% (0.33)	(g) (g)
.1 Percentage of cultivated hectares on beneficiary arms with improved agricultural practices	18%	25%	18% (b)	(b)				30%	(k) (i)		30%			60% of hect.	(h)
.2 Percentage of beneficiary farms on which natural esource management practices are used	28%	25%	28% (b)	(b)	45%	(g)		60%	(g)		70%			80% of hect.	(g)
ffect Indicators															
.1 Percentage of households that have adopted mproved agricultural practices	18%	(j)	(j)		30%	>27%	>90%	40%	(j)		60%			80% of h.holds	(j)
.2 Number of non-beneficiaries replicating improved ractices via farmer to farmer communication & raining	NA	250	>520 (c)	208%	250	930 440 (c)	372%	250	(j)		250			1250 total	>960, (j)

Agriculture Indicators	Base-line	FY99 Target	FY99 Ach'd	FY99 % Ach'd v Target	FY00 Target	FY00 Ach'd	FY00 % Ach'd v Target	FY01 Target	FY01 Ach'd	FY01 % Ach'd v Target	FY02 Target	FY02 Ach'd	FY02 % Ach'd v Target	LOA Target	LOA achieved
Output Indicators															
..1 Number of beneficiaries trained by MFSP staff and leader farmers in the use of improved practices	NA	400	>1130	282%	500	1087	217%	550	2,789	507%	550			2,500 total	5,006
..2 Number of farmers trained in improved practices at the demonstration farms	NA	120	54 (d)	45%	120	33 (d) 653 (f)	27%	120	33(d,j) 940(f)	27%	120			600 total	87
..3 Number of women farmers trained in raising and utilizing drought-tolerant crops for feeding their family	<1	60	210	350%	60	124	207%	60	335	558%	60			300 total	669
2.1 Centers for Demonstration & Training constructed	NA	2	10 (e)	(e)	0	27 (e)	(e)	0	0		0			2 centers	27
2.2 Number of family gardens established	NA	75	92	122%	100	15	15%	100	0		75			400 total	107
2.3 Number of improved grain silos constructed	NA	75	0 (a)	(a)	100	0 (a)	(a)	100	0 (a)	(a)	75			400 total	0 (a)
3.1 45 MT of drought-tolerant seeds will be provided to beneficiary farmers	NA	9 MT	33.1 MT	368%	9 MT	20.1 MT	223%	9 MT	56	622%	9 MT			45 MT total	109 MT

Footnotes

*Baseline yields data from July 1998 gathered in May 1999

(a) Median yields were nil (no quantitative data collected and no need for improved silos)
(b) 1999 data is same as baseline
(c) Only new farmers recorded
(d) Season-long trainees only
(e) Refers to Crop Adaptation Centres (off-station plots); total of 16 functional in FY 2001.
(f) Field days and trainings at off-station sites
(g) Negligible yields in pockets of the project area.
(h) Data already collected and will be analyzed by June, 2002.
(i) As the project will now end at the end of FY2002 and due to the drought, these indicators will be measured in FY2002
(j) Same trainees as FY2000, due to complete failure of demonstration plots, before harvest
(k) Could not be measured due to drought

Health and Nutrition Component

Overview

The health and nutrition component has achieved or exceeded 11 out of 17 measurable indicators for this year, and has already achieved 9 out of 18 LOA indicators. This is a very significant result given the context of continuously failing harvests over the LOA, which have decreased the availability of food. Although the project has largely failed to achieve malnutrition indicator targets for the year, malnutrition rates have improved significantly due to FHI emergency food assistance and adoption of improved nutritional practices promoted by the project. Failure to achieve these targets is also due to these targets not being readjusted downwards since baseline figures were established, in light of the disastrous harvests which have since occurred during the LOA. The results attained are summarized in the indicator tracking table at the end of this section.

Child growth is monitored regularly at 46 posts established in the project area by volunteer Community Health Workers. This activity provides an important vehicle for contact with mothers in order to provide nutritional counseling and education to them and to treat vitamin A deficiency and de-worm their children. In case of a serious anomaly, referral is made to the nearest health facility. These sessions are popular with mothers, who are becoming aware of the benefits of improved nutrition and disease control in the well-being of their children. In FY2001 70% of children under five were weighed at least once each quarter. This is well above the targeted coverage of 60% for the LOA.

In collaboration with the MOH and NGO-supported dispensaries, FHI staff gave a second phase training to total of 98 Community Health Workers (CHW's). These highly motivated community resource persons, selected by their communities, have continued to serve in this program for the last two years as volunteers. The fact that the program has been able to retain 100% of the CHW's without any form of payment throughout the year except for an equivalent of about $20 as Christmas gift, is attributed to the importance with which the community views the health messages being promoted. The program was expected to have trained 100 community health workers over the life of activity. By the end of FY2001 the project had trained and retained 98 CHWs that well exceeded the target of 90 CHWs.

CHW's also make an important and sustainable contribution to the MOH primary health care system, by reporting unusual incidence of diseases to the MOH. The MOH has responded by giving the CHW's drugs to treat illnesses that they are certified to treat. (CHW's are trained in the government approved curriculum). The CHW's also work as volunteers supporting the MOH during the National Immunization Days.

An important element in achieving higher coverage and higher adoption rates mentioned above has been the use of 379 volunteer contact mothers and collaboration with primary schools. The contact mothers are given participatory training to equip them to effectively disseminate project health education messages to other follower mothers. Mothers are seeing considerable benefits to their children's health as a result of adopting the practices promoted. This is noted during the field days when mothers organize themselves into groups and present songs and drama to their audience

about the importance of prolonged breastfeeding, control of diarrhea and importance of vitamin A in the family meals. A one-week child-to-child training of trainers' workshop for 16 primary school teachers, covered areas of growth faltering due to worm infestation and hygiene promotion activities.

Improved diarrheal control and treatment

A recent study found that Kenyan children who had diarrhea in the previous two weeks were more likely to be stunted than children who did not have diarrhea[2]. In a vicious circle high prevalence of diarrhea often leads to stunting and malnutrition, which in turn increase the prevalence of malnutrition. Despite the poor food availability situation in Marsabit, low rates of diarrheal incidence have been maintained, moreover the ability of mothers to treat diarrhea has improved significantly. The proportion of mothers who can correctly state how to prepare Oral Rehydration Solution (ORS) has increased from 38% at baseline to 78% this year, which exceeds the LOA target of 57%.

Child care and nutrition during diarrheal episodes has also dramatically improved. The proportion of affected children (0-23 months) being given the same amount or more breast milk during diarrheal episodes dramatically increased from 75% at baseline to 87%, although just short of the target 88%. In addition a very notable increase has been achieved in the percentage of children being given the same or more solid / semi-solid food during diarrheal episodes, which has increased from 52% at baseline to 87% this year, surpassing the LOA target of 78%.

Breastfeeding

The project did not achieve an increase in the proportion of children aged 20-23 months who are still breastfeeding. Actually the rate has dropped from 75% at the baseline to 67% in 2001. This is probably a result of the prolonged drought resulting in mothers staying away from home during the day for much longer periods than normal as they travel long distances in search of water, and food for their families. As an example, one mother noted that she could not bring her children to the growth monitoring post for weighing because she is the sole bread earner for them and has no time to take them there, nor has she time for prolonged breastfeeding. It is also well documented in public health literature that breast feeding, and continued breast feeding, are some of the hardest behavioral changes to achieve in traditional African societies; although FHI has achieved notable success in Mozambique.

De-worming

While there is no data on worm loads in Marsabit, it is likely that there are high levels of hookworm infestation. Worms contribute to malnutrition by decreasing appetite, lowering the absorption of nutrients and vitamin A and causing increased diarrheal episodes. In areas, such as Marsabit, where the prevalence of mildly underweight children exceeds 25%, the World Health Organization (WHO) recommends that high priority should be given to de-worming programs.[3] This was done at schools and

[2] USAID, Macro International Inc., IMPACT(1996). *Nutrition and Health Status of Young children and their mothers in Kenya. Findings from the 1993 Kenya Demographic and Health Survey.*

[3] Bundy, D.A.P. (1990). New initiatives in the control of helminths. Transactions of the Royal Society of Tropical Medicine and Hygiene. **8**4: 467-468.

during community wide mass de-worming campaigns. On average 1,200 children of 5-9 years were de-wormed out of the total 1,560 school children. During FY2001 FHI achieved coverage of 77%, exceeding the targeted coverage of 75% for the LOA. Coverage for the 24-59 month age group was also exceeded with 78% compared to a FY01 target of 75%.

Vitamin A supplementation

Vitamin A is also an especially serious contributor to poor food utilization in Marsabit, and may affect up to 30% of children in lowland areas[4,5]. Children with vitamin A deficiency (VAD) are much more likely to have severe diarrhea, to become malnourished, and to die. However, vitamin A supplementation alone has been shown to lower child mortality by as much as 25% in some studies. Vitamin A supplements were provided quarterly to 3,275 children, achieving coverage of 78% of the population and exceeding the LOA target of 75%.

Staff training

FHI views the professional development of national and government and local NGO staff as an important contributor to program effectiveness and long-term sustainability. The provision of appropriate training opportunities is an important element of this.

In January 2001, an Institutional Strengthening Agreement (ISA) workshop led by FHI headquarters staff in positive deviance, focussing on the Hearth Methodology, was conducted in Marsabit for 16 staff in both components, in addition to 5 ministry of health and agriculture staff. This analysis technique was then used effectively by staff to further adapt educational messages according to the best practices of households in the project area and their socio-cultural beliefs (see Monitoring and Evaluation section for details).

Nine staff are participating on a one year community development diploma course offered by PREMESE Africa. Two staff attended a Gender and development course, while the agriculture coordinator attended an Engendered Policy Analysis and Budgeting course.

Two staff were trained in Income proxy methodology at Training of Trainers workshop and went on to train 30 staff in data collection, while another was trained in income proxy data entry.

[4] Seinkuller, P.G. (1983). *Nutritional Blindness in Africa*. Soc. Sci. and Med., 17(22):1715-1721.
[5] FHI/Kenya (1998). Development Activity Project Proposal FY1998 - 2002, p. 39.

Health Component Indicator Performance Tracking Table

Health and Nutrition Indicators	Base-Line	FY1999 Target	FY1999 Ach'd	FY1999 % Ach'd v Target	FY2000 Target	FY2000 Ach'd	FY2000 % Ach'd v Target	FY2001 Target	FY2001 Ach'd	FY2001 % Ach'd v Target	FY2002 Target	FY2002 Ach'd	FY2002 % Ach'd v Target	LOA Target	LOA Achieved
Final Impact Indicators:															
1.a. % of children 2-5 yrs with ht-for-age Z score < -2.0	(Est) 40%	38%	32%	-6%	36%	42 %	+6%	34%	39%	-5%	32%			Decrease by 20% to : 32%	39%
1.b. % of children 24-35 m with ht-for-age Z-score<-2.0	45%	42%	(h)	(h)	40%	(h)	(h)	38%	(b)	(b)	36%			36%	
1.c. Average ht-for-age Z-score	-1.5	-1.43	-1.39	+6%	-1.35	-1.52	-6%	-1.28	-1.5	-17%	-1.2			-1.2	-1.5
2a. % of child. 12-36 m. with wt-for-age Z-score <-2.0	(est) 29%	27%	33%	-6%	25%	49%	-24%	24%	20%	+4%	23%			Decrease by 20% to 23%	20%
3a. % of child. 24-60 m. with wt-for-ht Z-score < -1.0	(est.) 31%	29%	(h)	(h)	27%	(h)	(h)	26%	26%	0%	25%			Decrease all by 20% to:- 25%	26%
3b. % of child. 24-60 m. with wt-for-ht Z-score < -2.0	6.6%	6%	10%	-4%	6%	(h)	(h)	6%	7%	-1%	5.3%			5.3%	7%
3c. % of child. 24-36 m. with wt-for-ht Z-score < -2.0	35%	33%	(h)	(h)	31%	14%	-7%	29%	(b)	(b)	28%			28%	(b)
Effect Indicators:															
1.a. Proportion of infants less than 6 mo. of age being given only breastmilk	12%	15%	(a)		18%	(a)		21%	(b)		24%			Increase by 100% to:- 24%	(b)
1.b. Proportion of infants less than 4 mo. of age being given only breastmilk	16%	20%	(a)		24%	(a)		28%	(b)		32%			32%	(b)
3. Proportion of children between 20 and 23 mo. who are still breastfeeding	75%	78%	(a)		81%	(a)		83%	67%	-16%	85%			Increase to 85%	67%
4. Proportion of children 0-59 m. who are weighed at least 4 times per year	16%	36%	79%	+43%	56%	84%	+28%	58%	70%	+12%	60%			Increase to 60%	70%
5. Proportion of CHW's who are trained in growth monitoring & promotion	<5%	15%	50%	+35%	90%	98%	+8%	90%	98%	+8%	90%			90% trained	98%
6. Average length of service of all CHW's hired during first two years	NA	N/A	N/A	N/A	N/A	N/A	N/A	NA	2 years		2.5 Yrs			Average of 2.5 years	2 years
Impact Indicator:															
1. Proportion of children 0-59 mo. who have had diarrhea in past 1 month	12%	<15%	2% (c)	+13%	<15%	2%(c)	+13%	<15%	10%	+5%(c)	<12%			Maintain already low level <12%	10%

ealth and Nutrition Indicators	Base-Line	FY1999 Target	FY1999 Ach'd	FY1999 % Ach'd v Target	FY2000 Target	FY2000 Ach'd	FY2000 % Ach'd v Target	FY2001 Target	FY2001 Ach'd	FY2001 % Ach'd v Target	FY2002 Target	FY2002 Ach'd	FY2002 % Ach'd v Target	LOA Target	LOA Achieved
ffect Indicators:															
a. % of children 0-23 m. with diarrhea in past 2 weeks given the same amt. or more breastmilk	75%	80%	(a)		85%	(a)		88%	87%	-1%	90%			Increase by 20% to 90%	87%
2b. % of children 0-23 m. with diarrhea in past 2 wks given the same amt. or more solid/semi-solid food	52%	62%	(a)		72%	(a)		75%	87%	+12%	78%			Increase by 50% to 78%	87%
Proportion of children 0-23 m. with diarrhea in past 2 weeks who were treated with ORT (exl. herbs)	41%	51%	(a)		58%	(a)		60%	67%	+7%	62%			Increase by 50% to 62%	67%
4. Proportion of mothers who give their child more food than usual during the post-diarrheal period	49%	59%	(a)		69%	(a)		72%	38%	-34%	74%			Increase by 50% to 74%	38%
utput Indicators:															
1.1 Proportion of mothers of children 0-23 m. who can correctly state how to prepare ORS from packets	38%	48%	(a)		53%	(a)		55%	78%	+23%	57%			Increase by 50% to 57%	78%
a. Proportion of children 24 to 59 m. who have received at least 1 dose of mebendazole in the past year	(est) 5%	45%	68%	+23%	60%	68%	+8%	75%	78%	+3%	85%			Increase to 85%	78%
o. Proportion of children 5-9 years who have received at least one dose of mebendazole within the past year	(est) 5%	45%	61%	+16%	65%	70%	+5%	70%	77%	+7%	75%			Increase to 75%	77%
3. Proportion of children 6mo-59 months who have received vitamin A in the past 6 months	<5%	45%	55%	+10%	65%	67%	+2%	70%	78%	+8%	75%			Increase to 75%	78%

Note: FY 1998 is not shown due to the delay in monetization.
(a) Data collected and will be analyzed by June, 2002.
(b) The results were measured during mid-term evaluation which turned out too high or low due to faulty sampling methodology of the consultants. We could therefore not use them in the tracking table.
(c) Diarrhea episodes change with season. Low incidence of diarrhea in FY 1999/2000 due to dry spell.
* Indicates revised baseline / target levels due to baseline survey results different from original estimated level in DAP

New DAP Proposal for FY2003-2007

FHI had requested a no-cost extension to complete the DAP in FY2003, however in December 2001, USAID/Washington requested FHI conclude the current DAP in FY2002, and develop a new DAP proposal for submission to the mission by 1 March 2002 for the period FY2003-FY2007. The mission, particularly requested FHI to consider interventions which address the food security needs of pastoralists, including marketing. FHI is currently developing this proposal, and at the request of the mission, a brief, tentative outline of the new proposal is included here in the context of response to FFP/Washington recommendations.

FHI is planning to propose an integrated food security program to reach over 23,000 direct participants, (5,600 families) centered on Marsabit mountain, and in surrounding communities on the arid plains, within 150 km of the town. It is anticipated that the LOA program cost will be about USD 5,500,000, and approximately USD 1,100,000 in FY2003. The program will build upon success in the current DAP in the promotion of drought tolerant crops and sustainable arid land agriculture in the mountain area. FHI has learned that it is necessary to broaden it's intervention to encompass a drought-robust integrated farming system including agroforestry and livestock. This will include the promotion of cassava, fodder systems and build on traditional home garden agroforestry systems. A component to improve milk production via upgrading the genetic stock of milk goats and improving livestock component is also envisaged. In the face of devastating pest attacks experienced in recent years, Integrated Pest Management will also be a key focus.

Lowland community development work will focus on improved livestock production and nutrition education. The livestock production intervention will focus on the establishment of a sustainable network of certified training of Community Based Animal Health Care Workers (CBAHW's) in association with a Micro Finance Institution (MFI) partner. Volunteer CBAHW's will be trained in veterinary medicine and business management; equipped with a supply of basic drugs on credit; and linked with private sector, district based veterinary suppliers.

FHI's successful model promoting improved nutritional practices for mothers with children under 5 years old in the mountain area will also be expanded to the plains. Activities will also include HIV/AIDS prevention, and sanitation (lowlands only). In order to reduce costs, the lowland extension staff, will have duties to train and encourage the CBAHW's facilitate livestock marketing and implement other interdisciplinary program interventions in addition to their public health duties.

FHI intends to develop livestock marketing in the district through a number of interventions. These will include working with District Administration, the Ministry of Agriculture and the Kenya Livestock Marketing Association to facilitate marketing through the development of a livestock price information system and organization of market days and auctions. FHI will also work with the Famine and Livestock Early Warning Systems (FEWS and LEWS) and district partners to improve two way communications between these institutions and beneficiaries. FHI also intend to develop marketing infrastructure by working with a national NGO to develop water points along current livestock trekking routes; and providing credit via a MFI partner to enable small livestock traders to invest in livestock holding pens and loading ramps in

community markets. Marketing studies will also be undertaken to evaluate the potential of livestock by-products, especially milk products.

FHI also intends to further make the marketing system more competitive to the benefit of small traders and pastoralists and to develop micro-enterprise, via provision of credit via it's MFI partner to small traders to enable them to expand purchases. They will also receive business training, and the project will link them to truckers and buyers in the terminal market. The program will also support the development of a (women's) milk based product industry in Marsabit, via technical training and the provision of business training and credit from it's MFI partner.

Finally FHI will seek to develop community leaders ability to resolve conflicts, via training, mentoring and assisting in the development of key messages and community training materials.

B. Monitoring & Evaluation, and Studies

A monitoring and evaluation system for this program was put in place during its inception in 1999. Progress reports are submitted each quarter followed by an annual results report each year and are shared with district level forums which include Government of Kenya (GOK) and other Non Governmental Organizations (NGO's). These include all the activities already drawn up to meet the objectives of the DAP as well as other supplementary activities.

The very serious drought together with insect pest infestations in FY1999, FY2000 and FY2001, resulting in the elimination of the majority of participants' crops before harvest, made the measurement of many of the results based indicators impossible for the agriculture component. However good harvests are expected for FY2002 and all indicators will be measured then as part of the final evaluation. There are also gaps in reporting results for s ome health program indicators. In these cases, data was collected but has not yet been analyzed due to staff turnover. FHI will ensure that data is analyzed prior to the final evaluation survey in August.

Occasional surveys and studies are also conducted to give attention to areas of need that are identified during the course of the project. In FY 2001, the following monitoring and evaluation activities took place: -

Mid-term evaluation

The mid term evaluation for this program was conducted as schedule d in August 2001 by the reputable Kenyan based rural development consultancy company of Breldan Consultants Limited (1986). Despite very clear terms of reference, the draft report is seriously flawed on a number of counts, which lead to doubt as to the va lidity of its conclusions and recommendations. These include a faulty sampling methodology, which has led to contradictory results within the report, and also meant that it is not possible to compare results against the baseline survey. In addition a number of indicators in the logframe were simply not measured, e.g. crop cuts. For this reason, FHI is unable to report on a number of indicators that were scheduled for evaluation in this FY. In addition the report lacks serious depth of analysis, has many cases of internal inconsistencies; and often seems to focus on presenting unsubstantiated subjective viewpoints, some of which are blatantly untrue; rather than a critical analysis

of the importance of factors impacting project objectives, and presenting lessons learned.

FHI is therefore in dispute with the company and withholding final payment on the contract until these issues are satisfactorily addressed. For this reason the conclusions and recommendations of the consultancy are not presented here, however pending a satisfactory reworking and rewriting of the evaluation, the report will be included in the FY2002 CSR4. This matter has been brought to the attention of the local mission, which has received the draft report findings, and FHI's response to them, in which FHI explained its' difficulties in adopting the report findings.

Anthropometry Survey

One anthropometric survey was conducted during the year by the FHI food security staff using a systematic sampling procedure. The sample size was 763 children of 0-59 months, and proportionately covered the entire project area). The indicator table below shows the trend of malnutrition in the project area over a three-year period. As is seen the situation worsened in 2000, to particularly severe drought induced famine. At this time there was no assistance in terms of food relief to communities. By the time the January 2001 study was done communities had already been on relief food for seven months, which improved nutritional status.

Yearly Results of Anthropometric Survey for Children under 5 years of Age (1999, 2000 & 2001)

Indicator	Jun 1999	Jun 2000	Feb 2001
1a. Wasting – Moderate and Severe Weight for Height (WHZ) z Score < -2.0	10.1%	13.6%	11.4%
1b. Severe Only Weight for Height (WHZ) z score < -3.0	0.6%	2.4%	0.9%
2a. Underweight-Moderate and Severe Weight for Age (WAZ) z score < -2.0	32.8%	48.8%	39.5%
2b. Underweight – Severe Only Weight for Age (WAZ) z score < -3.0	8.3%	15.2%	9.9%
3a. Stunting -Moderate and Severe Height for Age (HAZ) z score <- 2.0	31.6%	41.6%	39.4%
3b. Stunting – Severe Only Height for Age (HAZ) z score < - 2.0	7.9%	21.6%	14%

Positive Deviance Study

A positive deviance study was conducted in March 2001 by project staff who had received ISA funded training, in order to determine how to further improve mothers' reception to the generic health education messages delivered by the program staff.

The survey found that the traditional farmer group (Burji) have better nourished children than the other agro pastoral groups (Samburu/Rendille), despite the fact that the latter are more favoured in terms of irrigated farming and livestock. This is due to better child care and feeding practice among the Burji. Burji mothers frequently fed children on

more crop related foods such as porridge, maize meal, vegetable oil, green leafy vegetables (*shalqeda*), potatoes, cows milk and *Qitta* (a traditional Burji dish prepared from a mixture of wheat flour, *teff* or maize meal along with vegetable oil or animal fat). Furthermore, agro-pastoralists have less skill and preference in preparing and using crop related food than the non-pastoralists who are well versed with preparation of non-livestock products. This is mainly contributed to by traditional and socio-cultural practices among the former where eating of foods such as vegetables and chicken products was a taboo. In addition, Burji practices of slow weaning; feeding children on the same or more food during illness; and use of latrines; had statistically significant influences on child health.

In summary, childcare practice is an important contributor to child nutrition than the level of poverty and affordability in the study population. FHI is using these specific results to tailor health education messages.

Contact Farmer-Follower Farmer Assessment

A quantitative assessment was undertaken by project staff of 68 Follower Farmers and 82 Contact Farmers to evaluate the effectiveness of trainings and visits to contact farmers carried out so far by the agriculture staff, and to identify how to further strengthen existing approaches. Specifically it sought to :

1.) Assess the level of technology transfer to beneficiary farmers that can be credited to the program.
2.) Assess the impact of technology transferred to the contact farmers and follower farmers in their agricultural production.

The subsequent data collection and analysis revealed that the program training methodology is sound and project interventions are appropriate and appreciated by farmers. The following is a summary of the key findings for contact farmers:

- 97% of all respondents interviewed reported having changed some of their production methods/agronomic practices in the past two years.
- 19 agronomic practices promoted by the project were acknowledged as having been adopted in the last two years. The principal practises and adoption rates were:
  - Planting of DTCs' 56%
  - Soil Conservation 46%
  - Row planting 30%
  - Manure application 22%
- It is notable that the adoption of DTC's scored the highest among the adopted technologies, since it has been a major struggle to persuade the Marsabit farmers to cultivate other food crops besides maize and beans.
- The key sources of new knowledge were:
  - Residential training 74%
  - Field days 48%
  - farm visits by E.O.s' 44%
  - farmer tours 19%
- 87% of the contact and 61% of follower farmer adopters claimed to have benefited from the technologies that they had been taught. Although 30% of follower farmers indicated experiencing no benefit from what they had learnt, this may be attributed to the severity of the drought and generalised harvest failure.
- 89% of contact farmers and 74% of the follower farmers displayed a positive attitude towards continuing farming despite being in the middle of a severe drought.

- The roles of the contact farmers were unclear to the follower farmers as 41% of the follower farmers interviewed claimed not to have any contact farmer despite the fact that a follower farmer would not be called so without being associated a specific contact farmer.
- Residential trainings were more appreciated by farmers especially men.

FHI/Kenya has addressed the findings of the study through:

1. Adjusting the training curriculum for both contact farmers and follower farmers to incorporate topics like a revision on MFSP goals and objectives, communication for effectiveness, etc
2. Revising of the roles of the contact farmers and follower farmers during the farmers' trainings.
3. Strengthening the relationship between contact farmers and their followers, by encouraging group activities such as manure application and soil conservation.

Final evaluation

The final evaluation to be carried out by external consultants was originally scheduled to take place in FY 2003 due to a request for a no cost extension for FY 2003. Since the program will now close at the end of FY 2002, a final evaluation will be before the end of the year. Separate quantitative surveys based cluster sampling methodology will be carried out for both the agriculture and health components. This will be complemented by participatory project appraisal and appraising the project via key informant interviews with government and other stakeholders. The evaluation will particularly seek to identify successful project approaches and interventions, together with recommendations for further improvements to methodologies and appropriate new interventions, which might be implemented in any follow on project. FHI will ensure that results are effectively shared with government, NGO's and other interested bodies.

Income Proxy Model development.

In FY 2001, all CS's and USAID agreed to develop a proxy methodology for measuring household income using easy-to-collect proxy variables. Michigan State University (MSU) and Tegemeo are leading this process, with NGO's assisting in data collection. FHI's first round of data collection was conducted in June and July 2001 in which a complex questionnaire was administered to a random sample of 100 households in the FHI project area of Marsabit. Tegemeo/MSU then undertook data cleaning process and each NGO sent a staff to participate in the process. The cleaning exercise identified a number of errors in the data collection process amongst all NGO's. These will be rectified in the next round of data collection due to take place in February, 2002. The analysis of this data will give estimates of income and should allow for the identification of proxy variables. We believe that this process will lead to a successful development of income proxy model which can be used in measuring our title projects impact on rural household income.

C. Expenditure Report

Actual funding received from all sources was some $1,022,357 for the financial year compared to $1,492,792 approved in the DAP. This included a carryover of $29,117 in the monetization budget from the previous year. A total of $948,174 of the funding

available was spent in this financial year compared with $3,373,520 (99.7%) of the $3,382,999 made available LOA to date.

During the period $717,556 of monetization proceeds were spent on program activities, leaving a carryover of $52,555 for FY2002, $42,839 of 202e funding were spent with no carry over. FHI provided a contribution of $17,431 in the form of in kind food security program staff funding, and $170,347 FHI cash funding was expended.

Some 41% of monetization funds were spent on salaries, with FHI contributing $64,350 in salary funding to cover the costs of salaries for the collaborating education programs in the food security project area. A further $72,370 of monetization funding were spent on primarily on beneficiary and staff training under the evaluation line, as well as the Mid-term evaluation. A total of $21,445 of 202e funding under evaluation expenses was also used for training for both staff and beneficiaries

The other key areas of monetization fund expense were allocated program costs of $141,040, to which FHI contributed a further $41,267, and travel related expenses. FHI funding also made a significant contribution to the equipment and supplies budget through school fee support for the collaborating education program.

Full expenditure details may be found in appendix A.

D. Monetization Sales

Analysis of Monetization Transactions

In FY01 CRS, on behalf of the Kenya Food Security Consortium placed two monetization calls forward for a total of 34,930 MT of Hard Red Winter Wheat. FHI quota on the two call forwards was 4,440MT. The wheat was sold in three sales of 15000 MT, 7,500 MT and 12,430 MT to Rafiki Millers Ltd., Atta Kenya Limited and Pembe Flour Mills respectively.

In both calls forward above the commodities were sold prior to placing the call forward. However, while the commodity in the second call forward was on the high seas, the duty regime for wheat imports into Kenya changed. Wheat imported by registered millers was allowed into the country duty free except for a small levy of 2.75%. This affected cost recovery because the government's responsibility to contribute to CS project was reduced from 35% of the CIF of the commodity to 2.75%. Nonetheless cost recovery was attained.

There was a delay in the documentation of the first call forward's commodity resulting in detention of the vessel at the port of Mombasa. There was also an overvaluation of the commodity by the Kenya Revenue Authority resulting in a dispute with the buyer over duty payment. In future sales CRS will strengthen the "responsibility to pay duty" clause to ensure the buyer is bound to pay duty as levied by the relevant authorities.

In the second call forward, there was a problem at docking of the vessel at the port because the two buyers wanted to receive their lots at different berths. In addition the vessel's draft could not allow the vessel to go to certain berths. In future sales CRS will provide a clause in the contract to pre determine the berth and method of discharge to be used at the port of Mombasa. This information will be included in the freight tenders.

Actual Cost Recovery

	Call Fwd 1	Call Fwd 2	Total or Wtd Avg
1. Call Forward ID Number (a):	1066	1198	
2. Sale Date:	12/8/00	5/15/01	
3. Commodity:	Hard Red Winter Wheat		
4. Tonnage per Bill of Lading (MT) (b):	1,910	2,530	4,440
5. Exchange Rate (applicable when seller paid):	80.26	78.61	79.32
6. Actual commodity cost as shown on Bill of Lading ($):	$ 171,598	$ 328,062	$ 499,660
6. (a) Actual commodity cost as shown on Bill of Lading ($): inclusive of CIK	$ 231,657	$ 337,084	$ 568,741
7. Actual shipping cost as shown on Bill of Lading ($): *	$ 239,934	$ 94,116	$ 334,050
8. Note whether US/foreign flag vessel (US/FF):	US	FF	
9. Lowest valid foreign flag freight cost ($) (c):	$ 81,271	$ 94,116	$ 175,387
10. Actual sales price ($/MT) (d):	$ 128.48	$ 136.00	132.77
11. Total proceeds at actual sales price ($): (Inclusive of CIK)	$ 331,286	$ 353,542	$ 684,828
11. (a) Total GoK's CIK = duties & Taxes ($):**	$ 85,889	$ 9,462	$ 95,351
11. (b) Total proceeds at actual sales price ($): (Net cash rec'd)	$ 245,397	$ 344,080	$ 589,477
12. Local cost of monetization (transaction costs) ($):***	$ -	$ -	$ -
13. Net proceeds (total proceeds-transaction costs) ($): (Line 11-Line 12)	$ 331,286	$ 353,542	$ 684,828
14. Net proceeds / FF shipping (e) (Line 13/Lines 6a + 9):	1.06	0.82	0.92
15. Net proceeds/actual shipping (f) (Line 13/Lines 6 + 7):	0.70	0.82	0.77

* freight rate shown is actual on freight invoice and not on bill of lading

** Per tripartite monetization agreement betwenn USAID, KFSC and GOK of Feb 1997, the GOK is obliged to make a contribution in kind CIK equavalient to the total duty and taxes charged on the monetization shipments. Duty and taxes levied on monetization shipments are paid by the buyers.

*** monetization costs are covered by the lead agency - CRS Kenya

Monetization results

Maximizing Value of Proceeds

Kenya mainly produces soft wheat, which is blended with imported hard wheat to make home baking or bakers' flour. Consequently, hard wheat is the commodity of choice for monetization in Kenya as it is imported through out the year. The Kenyan market is very responsive to the international market prices oscillating between Argentine and Australian wheat at different times of the year. The fluctuations in the international wheat prices determine the price at which monetization wheat can be sold in Kenya. The two calls forward were sold and imported at times when supply of Argentine and Australian wheat was at the lowest thus ensuring good returns for the commodity.

To ensure that the value of monetization proceeds is maintained, the program negotiated the first sale agreements in Kenya shillings and payments were made in the same currency. Due to uncertainties in Kenya's foreign exchange market the second and third sales were negotiated in US dollars but the payments were made in Kenya shillings. Nevertheless the market was fairly stable and there was no loss of proceeds. CRS maintains an interest earning account in which the proceeds are deposited.

Monetization Sales Impacts

The two calls forward were sold and imported without causing any disruption to local marketing or production. The imported commodity was sold to millers at competitive (ex-ship's tackle) prices. Thereafter, the wheat smoothly entered the already existing market channel right down to the consumer. The buyers milled the wheat and released it to the market in small lots thus mitigating any would be negative effects on the market.

Per the Belmon analysis, the country wheat requirement stand at 780,000MT as compared to the local production of 252,000MT. This leaves a shortfall of 540,000MT into which the monetized quantity fits in very well. In relation to the supply shortfall, the 34,930MT of commodities monetized in FY 2001 were too small to have any noticeable impact on the food security.

FISCAL YEAR FY2003 & FY2004 RESOURCE REQUESTS

II. RESOURCE REQUEST

A. Program Request Summaries

FHI Kenya is in the final year of its DAP and will be submitting a new DAP for FY 2003 – 2007. Therefore a resource request is not included in this CSR4.

B. Activity Resource Requirements

FHI Kenya is in the final year of its DAP and will be submitting a new DAP for FY 2003 – 2007. Therefore a resource requirement is not included in this CSR4.

1. Financial Plan

a. Comprehensive Budget

Not applicable. See explanation above.

b. *FY 2002 Section 202(e) Request & Narrative*

Not applicable. See explanation above.

c. Monetization (Foreign Currency) Pipeline Analysis

Not applicable. See explanation above.

d. Monetization Proceeds (up to one page)

2. Commodities

a. Annual Estimate of Requirements (AER)

Not applicable. See explanation above.

b. Commodity Procurement Schedule

Not applicable. See explanation above.

c. Anticipated Monetization Cost Recovery Calculation and Estimate

Not applicable. See explanation above.

d. Bellmon Analysis

Not applicable. See explanation above.

C. Environmental Compliance

TITLE II ENVIRONMENTAL STATUS REPORT FACESHEET

Title of DAP/PAA Activity: Marsabit Food Security Program

CS name/Country/Region: Food for the Hungry International / Kenya

Funding Period: FY1998 – FY 2002

Resource Levels: Commodities (dollar equivalent, incl. monetization): $5,919,621.19
Total metric tonnage request: 20,067 MT
202(e) grant (LOA): $547,924

Status Prepared by: Evans M. Isaboke **Date:** 27th January, 2002 **Title:** Program Assistant

Date of Previous Status Report:
Previous ESR submitted in FY2000&FY2002 CSR4 Report, 31 January, 2001

A. Status of the IEE/Categorical Exclusion/EA or PEA

IEE Reference: Date of most recent IEE or Categorical Exclusion (If all activities were CEs): IEE (Amendment) Submitted 15 July, 2001

__X__ No revisions or modifications needed. IEE/CE or CE and all activities still applicable

_____ Amended IEE submitted, based on attached report, summary, etc., (referencing the body).

_____ EA or PEA needs to be amended to cover additional or modified activities. [Note: If yes, immediately notify the MEO, REO (where one exists) or the BHR BEO. Amended EA or PEA submitted, based on_____

B. Status of Fulfilling Conditions in the IEE, including Mitigative Measures and Monitoring

__X__ Environmental Status Report describing compliance measures taken is attached.

_____ For any condition that cannot be satisfied, a course of remedial action has been provided within an IEE Amendment. [Note: For conditions under an EA or PEA, consult the MEO, REO (where one exists) and/or BEO].

USAID APPROVAL OF ENVIRONMENTAL STATUS REPORT:
Clearance:

Mission Environmental Officer:* _____ Date: _____
Margaret Brown

Food For Peace Officer: _____ Date: _____
George Mugo

APPENDICES

APPENDIX A: EXPENDITURE REPORT

Appendix A1: Expenditure Report for FY98 to FY 2001 (US$)

US $1 =**79.02** local currency using Central Bank exchange rate of Oct. 31st 2001

Funding Sources

Consolidated Line Items	Monetiz'n Proceeds Approved	Monetiz'n Proceeds Actual	Section 202e Grant Approved	Section 202e Grant Actual	Recipient Contrib'n Approved	Recipient Contribut'n Actual	FHI Non-Cash Approved	FHI Non.Cash Actual	FHI Funds Cash Approved	FHI Funds Cash Actual	Local GoK Approved	Local GoK Actual	TOTAL Approved	TOTAL Actual
FY 98 Opening Balance		**(3,906)**		**-**										(3,906)
FY1998- 2001 Income-new funds	2,896,457	1,923,322	346,101	65,001					1,293,037	1,157,779	464,100	127,650	4,999,695	3,273,752
FY 1998-2001 income-interest	29,290	14,913											29,290	14,913
Non Cash Contributions					86,203		86,203	87,541					172,406	87,541
Total FY1998- 2001 Income	**2,925,747**	**1,938,235**	**346,101**	**65,001**	**86,203**	**-**	**86,203**	**87,541**	**1,293,037**	**1,157,779**	**464,100**	**127,650**	**5,201,391**	**3,376,206**
Funds Avail. in FY 2001	**2,925,747**	**1,934,329**	**346,101**	**65,001**	**86,203**	**-**	**86,203**	**87,541**	**1,293,037**	**1,157,779**	**464,100**	**127,650**	**5,201,391**	**3,372,300**
Expenses														
Personnel	972,154	684,457							193,955	281,016	78,684	49,103	1,244,793	1,014,576
Evaluation/Monitoring/Evaluation	434,978	208,096	109,825	44,713					255,455	50,016	125,859	78,547	926,117	381,372
Travel and Related Expenses	243,838	182,592							90,512	151,512			334,350	334,104
Occupancy	-	15,982							12,930	14			12,930	15,996
Office Operation	18,044	65,949							12,930	116,126			30,974	182,075
Equipment/Supply/Materials	325,116	191,698	143,975						168,095	319,333	259,557		896,743	511,031
Commdities & Related Expenses	-	147											-	147
Non-Cash Expenses					86,203		86,203	87,541					172,406	87,541
Allocated Program costs Cost	663,167	367,764	51,961	13,908					448,253	282,838			1,163,381	664,510
Sub Totals	**2,657,297**	**1,716,685**	**305,761**	**58,621**	**86,203**	**-**	**86,203**	**87,541**	**1,182,130**	**1,200,855**	**464,100**	**127,650**	**4,781,694**	**3,191,352**
NICRA	299,090	175,788	34,340	6,380									333,430	182,168
FY 1998 - 2001 Total Expenses	**2,956,387**	**1,892,473**	**340,101**	**65,001**	**86,203**	**-**	**86,203**	**87,541**	**1,182,130**	**1,200,855**	**464,100**	**127,650**	**5,115,124**	**3,373,520**
FY 2001 Closing Balance	**(30,640)**	**41,856**	**6,000**	**-**	**-**	**-**	**-**	**-**	**110,907**	**(43,076)**	**-**	**-**	**86,267**	**(1,220)**

Appendix A2: Expenditure Report for FY 2001 (US$)

US $1 =**79.02** local currency using Central Bank exchange rate of Oct. 31st 2001

Funding Sources

Consolidated Line Items	Monetiz'n Proceeds Approved	Monetiz'n Proceeds Actual	Section 202e Gran Approved	Section 202e Gran Actual	Recipient Contrib'n Approved	Recipient Contribut'n Actual	FHI Non-Cash Approved	FHI Non-Cash Actual	FHI Funds Cash Approved	FHI Funds Cash Actual	Local GoK Approved	Local GoK Actual	TOTAL Approved	TOTAL Actual
FY 00 Opening Balance	**57,423**	**29,117**		**-**					**1,841**				59,264	29,117
FY 2001 Income-new funds	865,800	740,116	34,493	32,140					330,750	191,976	121,000		1,352,043	964,232
FY 2001 income-interest	4,000	878											4,000	878
Non Cash Contributions					22,050		22,050	17,431					44,100	17,431
Total FY 2000 Income	**869,800**	**740,994**	**34,493**	**32,140**	**22,050**	**-**	**22,050**	**17,431**	**330,750**	**191,976**	**121,000**	**-**	**1,400,143**	**982,541**
Funds Avail. in FY 2001	**927,223**	**770,111**	**34,493**	**32,140**	**22,050**	**-**	**22,050**	**17,431**	**332,591**	**191,976**	**121,000**	**-**	**1,459,407**	**1,011,658**
Expenses														
Personnel	390,988	290,869							49,613	64,350	20,514		461,115	355,219
Evaluation/Monitoring/Evaluation	75,900	72,370	26,200	21,445					65,100	-	32,814		200,014	93,815
Travel and Related Expenses	74,600	70,613							23,153	15,333			97,753	85,946
Occupancy	12,000	7,491							3,308	-			15,308	7,491
Office Operation	23,400	29,786							3,308	14,058			26,708	43,844
Equipment/Supply/Materials	54,575	37,330	-						42,998	35,339	67,672		165,245	72,669
Commdities & Related Expenses	-	-											-	-
Non-Cash Expenses					22,050		22,050	17,431					44,100	17,431
Allocated Program Cost	212,333	141,040	5,240	7,514					114,660	41,267			332,233	189,821
Sub Totals	**843,796**	**649,499**	**31,440**	**28,959**	**22,050**	**-**	**22,050**	**17,431**	**302,140**	**170,347**	**121,000**	**-**	**1,342,476**	**866,236**
NICRA 9.005%	81,933	78,756	3,053	3,182					27,110				112,096	81,938
FY 2001 Total Expenses	**925,729**	**728,255**	**34,493**	**32,141**	**22,050**	**-**	**22,050**	**17,431**	**329,250**	**170,347**	**121,000**	**-**	**1,454,572**	**948,174**
FY 2001 Closing Balance	**1,494**	**41,856**	**-**	**(0)**	**-**	**-**	**-**	**-**	**3,341**	**21,629**	**-**	**-**	**4,835**	**63,484**

APPENDIX B: MONITORING AND EVALUATION, AUDITS AND STUDIES

Appendix B1: Anthropometry Survey

According to the programme design, anthropometry surveys were bi-annual activities meant to assess the community nutrition status and programme achievement. Although the programme was to conduct two of these surveys in 2001, this did not happen because the mid term evaluation scheduled during the year was to cover this too.

In February an anthropometrical survey was conducted in the project area. Samples of 761 children under five years of age were selected through systematic sampling procedures. The result derived was used to give the general picture of status of malnutrition in the programme area and also gauge the effect of the programme intervention on child health and nutrition.

Result of anthropometrical survey for children under 5 years of age in Marsabit Central Division (1999, 2000 and 2001) is summarized on the table below:

Yearly Results of Anthropometric Survey for Children under 5 years of Age (1999, 2000 & 2001)

Indicator	Jun 1999	Jun 2000	Feb 2001
1a. Wasting – Moderate and Severe Weight for Height (WHZ) z Score < -2.0	10.1%	13.6%	11.4%
1b. Severe Only Weight for Height (WHZ) z score <-3.0	0.6%	2.4%	0.9%
2a. Underweight-Moderate and Severe Weight for Age (WAZ) z score < -2.0	32.8%	48.8%	39.5%
2b. Underweight – Severe Only Weight for Age (WAZ) z score <-3.0	8.3%	15.2%	9.9%
3a. Stunting -Moderate and Severe Height for Age (HAZ) z score <- 2.0	31.6%	41.6%	39.4%
3b. Stunting – Severe Only Height for Age (HAZ) z score < - 2.0	7.9%	21.6%	14%

The indicator table above shows the trend of malnutrition in the project area over a three-year period. As is seen the situation worsened in 2000 but again started picking up in February 2001. The year 2000 was particularly bad in terms of weather. The rains totally failed during this time and the drought situation left many families without food. As the famine slowly crept in malnutrition increased too.

When the June 2000 study was conducted, there was no any assistance in terms of food relief to communities. By the time the January 2001 study was done

communities were already on relief food for five months. While we could say that the changes in malnutrition status is directly related to the drought situation, we cannot conclude to what extent the famine relief food impacts on the same.

Appendix B2: Positive Deviance Study

A positive deviance study was conducted in March 2001 where results were used to develop health education messages for different cultural groups. The result of this survey is discussed below.

Background: The child health and nutrition project run by Food for the Hungry International, Kenya program, has been conducting a generic health education sessions to mothers of children less than five years of age since September, 1999. However, the mothers' reception to these educational messages remained somewhat lukewarm in that they were just a series of messages aimed at passing information rather than requiring targeted action. After learning the hearth methodology, the health team initiated a series of Positive Deviance studies in the three ethnic groups in its project area.

Two of these communities' (Borana, Samburu/Rendille) are agro-pastoralists while the other (Burji) are traditional smallholder arable farmers. Further, the Burji have relatively less income in that most families lived on an average of 2 acres of land while the other two groups (Borana and Samburu/Rendille) owned more than two acres on average and kept livestock alongside this. In addition, the Samburu/Rendille group living in Songa practice farming in an irrigation scheme where they mainly planted vegetables, much of which they sold at a nearby market.

***Methodology*:** A qualitative cross-sectional study involving a total of 81 mothers of children less than five years of age was conducted in Songa, Sagante and Dakabaricha locations of Marsabit District, Kenya.

The villages were clustered into the three ethnic zones and a Growth Monitoring Post randomly selected from each village. Only children accompanied by their mothers were weighed and information about them collected from the mothers. Children not accompanied by the mothers were were excluded because there was little possibility of getting accurate information about breastfeeding and the other practices from non-mothers . The child growth card was used to determine whether the child was positive or negative deviant.

Through anthropometrical assessment of weight for age conducted at the Growth Monitoring Posts, the children were further identified as either well nourished (positive deviant- PD) or malnourished (negative deviant-ND). Different questions pertaining to child feeding practices, care practices, health seeking behavior and home management of diarrhea as well as the mothers' worldview were formulated for each group (PD and ND) and administered separately to those mothers with positive and negative deviant children. The mothers of children falling in neither of the group (in-between) were not interviewed, but only given the appropriate health education messages.

Results: The traditional farmer group (Burji) had better nourished (PD) children than the other agro pastoral groups. The Samburu/Rendille who were more favoured by irrigation farming and livestock had the highest number of malnourished children. Child care and feeding practice were found to be better among the Burji where most of the mothers frequently fed children on more crop related foods such as porridge, maize meal, vegetables oil, green leafy vegetables (*shalqeda*), potatoes, cows milk and *Qitta* (a traditional Burji dish prepared from a mixture of wheat flour, *teff* or maize meal along with vegetable oil of animal fat). Generally however, slow weaning had statistically significant influence on child health Odds Ratio= 0.15 (CI: 0.04-0.47), P=0.0005. Most of the Burji children fall in this category. Family's using latrines to relieve themselves had OR =0.29 (CI: 0.1-0.81); P<0.016,while feeding the child on same or more food during illness had significant influence on child nutrition OR=5.01 (CI: 1.69-15.26); P<0.002, a practice most common among the Burji.

Conclusion: Occupation and socio-cultural practices seem to have great influence on child nutrition in the study population. Furthermore, agro-pastoralists have less skills and preference in preparing and using crop related food than the non-pastoralists who are well versed with preparation of non-livestock products. This is mainly contributed to by traditional and socio-cultural practices among the former where eating of food such as vegetables and chicken products was a taboo unlike the latter. Childcare practice is an important contributor to child nutrition than the level of poverty and affordability in the study population. Positive Deviance studies can be used to formulate a cultural specific health education interventions in a multi-cultural society.

Appendix B3: Contact Farmer-Follower Farmer Assessment

The assessment was the result of a felt need to evaluate the effectiveness of trainings and visits to contact farmers carried out so far by the agriculture staff. This was done with a view to strengthening existing approaches and overcoming the shortcomings.
The subsequent data collection and analysis did not reveal anything particularly worrying but the findings and conclusion made thereof were of immense value in designing future training messages and reassessing the success of the CF/FF concept. As a result the subsequent trainings included among other topics a revision of the overall food security goals and objectives of the program.

Objectives of CF/FF Assessment Exercise
That by the end of the assessment exercise, it will be possible to:-
1. Assess the level of technology transfer to beneficiary farmers that can be credited to the program.
2. Assess the impact of technology transferred to the contact farmers and follower farmers in their agricultural production.

Results:
(a) Contact farmers:
1. 97% of all respondents interviewed reported having changed some of their production methods/agronomic practices in the last two years.
2. 19 agronomic practices (e.g. crop rotation, row planting etc.) were acknowledged as having been adopted in the last two years. This is a fairly large number of technologies with the biggest adoption being planting of DTCs' at 55% of total respondents interviewed. (C.f. analysis table)
3. Of the 71 who acknowledged having adopted specific measures, the following represents percentage of adopters: -
   - Planting of DTCs' 56%
   - Soil Conservation 46%
   - Row planting 30%
   - Manure application 22%
   - Utilization of DTCs' 1%
4. The largest source of new knowledge was attributed to residential trainings & field
   days.
   The number of CFs who mentioned each source is as follows

- Residential training 74%
- Field days 48%
- farm visits by E.O.s' 44%
- farmer tours 19%

5. 87% of adopters claimed to have benefited from the technologies that they had been taught.

6. 89% of our respondents displayed a positive attitude towards continuing farming despite the biting drought at that point in time.

(b) Follower farmers

1. 41% of the respondents reported that they didn't have CFs' while another 6% weren't even sure if they had a CF or not.
2. 61% of those who acknowledged having a CF, reported to having had an association of more than one calendar year.
3. 31 % of those who acknowledged having a CF couldn't tell how long they had had a CF which implies they couldn't remember how long they had been FFs.
4. 61% of the 36 people who admitted to having CFs' reported benefiting from the technologies they had learnt from their CFs'. 30% of the 36 FFs with CFs' however indicated experiencing no benefit from technologies learnt from CFs'.
5. Of the 68 FFs' interviewed, 74% displayed a positive attitude towards farming despite being in the middle of a biting drought.
6. It emerged that most respondents did not know the precise goal of MFSP is and many provided diverse answers such as increasing living standards, provision of training etc.

CONCLUSION

From the results, it was concluded that;

- Training of farmers played a key role in knowledge transfer to the beneficiaries
- Residential trainings were more appreciated by farmers especially men
- Farmers did not see a direct connection between agriculture and health in achieving the food security goal
- The contact-farmers were not as effective as expected in reaching out to their follower farmers

ACTION

Training curriculum for both contact farmers and follower farmers was adjusted to incorporate topics like a revision to MFSP goals and objectives, communication for effectiveness, etc

APPENDIX C: ENVIRONMENTAL REVIEW AND COMPLIANCE INFORMATION

ENVIRONMENTAL STATUS REPORT (ESR)

Conditions laid out in the Amended IEE approved by the REO on 21 August, 2001 are being met and the mitigation plan is on schedule.

Section A. Status of the IEE/Categorical Exclusion/EA or PEA

A1. Modified or New Activities:

New activities were proposed as part of a DAP amendment for FY2002 and a corresponding amended IEE submitted to cover these activities. However the amendment was rejected by USAID, and FHI was encouraged to submit a proposal for a new DAP for FY2003-2007.

The only modified activities which are being implemented are those relating to pesticide use, in the face of serious pest outbreaks which seriously threaten food security in the project area. This activity refers to the training of farmers in the safe use of agro-chemicals in association with the government, as part of Integrated Pest Management. The purchase and supply of chemicals for farmer training and supply has been done exclusively by the government, and hands on practical demonstration of chemicals is also done by trained government staff. FHI has undertaken training in pest identification, economic threshold levels, pesticide selection, the safe and effective use of pesticides, storage and disposal of containers.

Pesticides were not purchased as envisaged under the amended PERSUAP (Pesticide Evaluation Report and Safer Use Action Plan) to combat emergency infestation, as the government has purchased pesticides and supplied them to communities. The project has however lent protective clothing and sprayers to farmers after they have passed the appropriate safe use of pesticides training course, as envisaged in the PERSUAP.

A2. Resolution of Deferrals:

There was only one deferral recommended in the original IEE, which was for the use of agro-chemicals during training and demonstrations at ADFs. At the time of writing the IEE, the agro-chemicals had not been identified, hence a deferral was requested. The original IEE covering FY1998-2002 was cleared and signed by the local mission in August 1999. Due to frequent infestation by migratory pests, FHI submitted an amendment to the original IEE that included a PERSUAP proposal during FY 2001 to resolve the deferred activity. The amended IEE was approved on 24th September, 2001.

The interventions being implemented exclusively cover three aspects of the use of insecticides: research and demonstration plots, farmer training on pesticide application and the purchase of pesticides upon outbreak of pest problems that may destroy the crops.

A3. Conditions:

All the conditions of the original IEE are being complied with, without difficulty. Conditions relating to the safe use of pesticides relating to new activities covered by the amended IEE approved on 24th September, 2001, are being complied with. No substitute conditions or additional conditions are required to comply with the spirit of the conditions in these IEE's.

Mitigation and monitoring is being undertaken as planned in both the above IEE's. There is no need to change the conditions for mitigation and monitoring spelled out in the IEE

A4. Amendments:

Based on the above, is an amended IEE needed?

___ Yes If yes, attach here. No _X__

If the previous documentation was a Categorical Exclusion Submission, is an amended Categorical Exclusion needed to deal with new Categorical Exclusions for new activities?

___ Yes If yes, attach here. No___ Not Applicable _X__

Is the Sponsor unable to meet recommendations and/or conditions that are part of an EA or PEA or does the Sponsor believe an EA or PEA needs to be amended to cover additional or modified activities?

___ Yes No____ Not Applicable _X_

If yes, immediately notify the MEO, REO (where available) or the BHR BEO.

Section B. Status of Fulfilling Conditions in the IEE, including Mitigative Measures and Monitoring

The monitoring and mitigation plan FHI committed to in both the original IEE and amended IEE mentioned above is being adhered to without any problems.

B1. Mitigation Measures and Monitoring and other conditions

Mitigative measures and monitoring or other conditions for each program component may be found in the annex to this report.

B2. Compliance With Mitigation Measures

Mitigative measures in place are summarized in the table in the annex. Mitigative measures are working and no adjustments are required. Mitigative measures have been determined through site visits by the program assistant responsible for monitoring implementation of environmental compliance.

Section C. Cooperating Sponsor Recommendations for Beyond Compliance and Institutionalization of Environmentally Sound Practices

None

ANNEX: MITIGATIVE MEASURES AND MONITORING AND COMPLIANCE WITH MITIGATION MEASURES

Project Activities	Potential Environmental Impact	Mitigation Measures Planned	Determination of success of mitigation	Frequency of monitoring	Location of monitoring	Action required
1. Demonstration and training at the ADF						
a)Establish Agricultural Demonstration Farms	* Soil erosion	*Farmers continue to inter-crop and practice crop rotation. *Planting grasses stabilize terraces	* 3,360 of farmers practicing soil conservation measures mid-term evaluation Site visits	Annual	Farmers fields & ADF	None Not planted due to drought. Will be planted in FY2002.
b)Soil conservation or Soil fertility improvement	*Uncontrolled spread of Napier and Makarikari grasses to farm lands	*Control grass by cutting and feeding livestock or directly grazing.	mid-term evaluation Site visits Not implemented due to drought.	Annual	Farmers fields & ADF	None. Will be implemented and monitored in FY2002.
c) Pest/disease Control	Human injury through misuse *Environmental contamination agro-chemicals	*Farmers trained on safe handling of agro-chemicals through IPM *Provision of protective equipment to farmers. *Compliance with Pesticide Use checklist in IEE	5,040 of farmers trained in handling of pesticides using IPM 5,040 of farmers using IPM 24 one-day trainings in IPM and safe use of pesticides/agro-chemicals Farmers use equipment	Monthly	ADF	None. Note there was no purchase and distribution of pesticides by FHI.

Project Activities	Potential Environmental Impact	Mitigation Measures Planned	Determination of success of mitigation	Frequency of monitoring	Location of monitoring	Action required
d)Bulk drought tolerant seeds	• Use of uncertified and untested seeds • Eating seed	*Seeds certification Farmer training	101 MT of Pigeon peas, cowpeas, beans and maize, sweet potatoes distributed to 5,600 farmers farmers were trained before distributions	As purchased Biannually	Government responsibility At distribution days	None. Bulking was unsuccessful due to drought. None
e) Construct improved grain silos	* Felling of the indigenous trees available	Activity was not conducted due to failed harvest of crops in the past four seasons.	Activity was not conducted due to failed harvest of crops in the past four seasons.	Annually	Farm visits.	None.
f)Promote improved Poultry breeds	* Spread of poultry diseases that may require use of drugs	Vaccination	Activity was not conducted.	Annually	Farm visits	None. Activity will not be implemented.

APPENDIX D: RAINFALL IN MARSABIT, 1950-2001, BY CROPPING SEASON (MM)

Year	Mar-May	Oct-Dec	Total
1950	545	64	609
1951	454	512	966
1952	328	378	707
1953	375	512	887
1954	453	260	713
1955	262	170	432
1957	456	253	708
1958	330	144	475
1959	532	252	784
1960	365	246	611
1961	522	972	1,494
1962	428	178	606
1963	636	454	1,090
1964	224	333	556
1965	270	509	779
1966	480	240	720
1967	481	748	1,229
1968	361	710	1,072
1969	374	261	634
1970	748	81	829
1971	270	346	616
1972	261	411	672
1973	86	320	406
1974	277	106	382
1975	299	67	365
1976	144	156	300
1977	394	399	793
1978	430	284	714
1979	346	283	628
1980	240	285	525
1981	845	271	1,116
1982	865	582	1,447
1983	389	79	468
1984	198	247	445
1985	809	236	1,045
1986	309	193	503
1987	479	90	569
1988	78	791	868
1989	409	295	704
1990	396	279	675
1991	194	115	309
1992	222	304	526
1993	495	145	640
1994	192	358	550
1995	534	219	754
1996	155	69	224
1997	391	1,042	1,433
1998	405	121	526
1999	180	126	306
2000	13	60	74
2001	235	212	447
Average	**376**	**309**	**685**
Average (over 20 years to 1999)	**399**	**300**	**698**
Max	**865**	**1,042**	**1,494**
Min	**13**	**60**	**74**

APPENDIX E: CERTIFICATION REGARDING LOBBYING

Country/CS FY x Results Report and FY x+2 & FY x+3 Resource Request

Appendix E

Certification Regarding Lobbying

Submitted in connection with submission of proposal initiating USAID/BHR/FFP consideration of P.L. 480 Title II grant request including any or all of the following: commodities; ocean freight; inland freight; internal transportation; storage and handling; Section 202(e); Institutional Support.

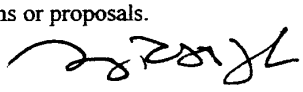
The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, 'Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less that $10,000 and not more than $100,000 for each such failure. By signature hereon, the applicant/grantee certifies that the information contained herein is accurate, current, and complete to the best of its knowledge and belief, and that the applicant/grantee is aware of the penalty prescribed in 18 U.S.C. 1001 for making false statements in applications or proposals.

Signature: 

Typed Name : Gary St John

Organization: Food for the Hungry, Inc.

Title: VP/CFO

12/15/01